ABSTRACT

Beta-amyloid peptide (βA) is a major fibrillar component of neuritic plaques in Alzheimer's disease brains and is related to the pathogenesis of the disease. βA generation depends on proteolytic cleavage of the amyloid precursor protein (APP). The present invention is a new procedure to easily and rapidly obtain the APP constructs for the expression of full-length recombinant APP protein. This procedure consists of: 1) cloning human APP gene based on the reverse transcription (RT) and the polymerase chain reaction (PCR); and 2) performing the APP constructs using the commercially available expression vectors, a/ pFastBac HTb and the pBlueBacHis2 A transfer vectors for the purpose of obtaining recombinant human APP in insect cells; and b/ pET-28a (+) transfer vector for the purpose of obtaining recombinant human APP in bacteria.